AMENDMENTS TO THE CLAIMS

(IN FORMAT COMPLIANT WITH THE REVISED 37 CFR 1.121)

Please cancel claims 2 and 7 without prejudice. Please add new claims 21 and 22.

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1. (CURRENTLY AMENDED) An apparatus comprising:

an interface connectable to a network; and

a node configured (i) as an add/drop device for said network, (ii) to transport ~~one or more~~ a plurality of packets having a plurality of protocols within a frame~~, comprising one or more nodes configured to add and/or~~ on said network through said interface and (iii) to drop at least one of said ~~one or more~~ packets from said frame.

2. (CANCELED) The apparatus according to claim 1, wherein said one or more nodes comprise add/drop multiplexers (ADMs).

3. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein said ~~one or more nodes~~ node comprises a SONET/SDH add/drop multiplexer ~~multiplexers (ADMs)~~.

4. (ORIGINAL) The apparatus according to claim 1, wherein said frame is further configured to optimize a bandwidth of said apparatus.

5. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein said ~~apparatus~~ network comprises a fiber optic network.

6. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein said ~~apparatus~~ network comprises one of a Synchronous Optical Network frame and a Synchronous Digital Hierarchy ~~a SONET/SDH~~ fiber optic network.

7. (CANCELED) The apparatus according to claim 1, wherein said packet further comprise a header configured to identify a data type of said one or more packets.

8. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein said ~~header~~ frame comprises (i) a packet envelope to hold said packets and (ii) a label having ~~frame specific~~ information specifying that at least two of said protocols are used in a packet envelope.

9. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein said ~~one or more~~ packets are selected from a group

consisting of (i) Internet Protocol ~~IP~~ packets, (ii) Packet-Over-SONET/SDH packets ~~(POS)~~, (iii) Point-to-Point Protocol ~~PPP~~ packets, (iv) Asynchronous Transfer Mode ~~ATM~~ cells, (v) G.702-based Plesiochronous Digital Hierarchy ~~PDH (T1/T3)~~ packets, and (vi) Frame Relay packets~~, and any other byte stream~~.

10. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein said ~~apparatus comprises a media~~ network is selected from ~~the~~ a group consisting of ~~ring and~~ a point-to-point ~~networks~~ network and ~~non-SONET/SDH configurations such as point-to-point WDM networks~~ a Wavelength Division Multiplexing network.

11. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein ~~each of said nodes~~ said node is further configured to determine a reusability of each of said ~~one or more~~ packets within said frame received at said interface.

12. (CURRENTLY AMENDED) The apparatus according to claim 11, wherein ~~each of said nodes~~ said node is further configured to determine ~~a~~ said reusability of each of said ~~one or more~~ packets in response to a reuse bit.

13. (CURRENTLY AMENDED) The apparatus according to claim ~~1~~ 12, wherein each of said ~~one or more~~ packets comprise a payload

header configured to store said reuse bit ~~packet specific information~~.

14. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein ~~each of said one or more nodes~~ said node is selected from the group of (i) terminal multiplexers and (ii) SONET/SDH add/drop multiplexes, ~~ADMs and~~ (iii) data-aware SONET/SDH ~~ADMs~~ add/drop multiplexers and (iv) digital cross-connects ~~(DCCs)~~.

15. (CURRENTLY AMENDED) An apparatus comprising:

a plurality of ~~one or more~~ nodes configured to interface to a network, wherein each of said ~~one or more~~ nodes is configured to ~~interface one or more data types~~ generate a frame on said network comprising a plurality of packets having a plurality of different protocol received through a plurality of interfaces.

16. (CURRENTLY AMENDED) A method for transporting ~~one or more~~ a plurality of packets ~~each comprising at least one of a plurality of data types~~ having a plurality of protocols within a frame, comprising the steps of:

(A) adding at least one new packet having one of said protocols to ~~of~~ said ~~one or more~~ packets in said frame; and

(B) dropping at least one of said ~~one or more~~ packets in said frame.

17. (CURRENTLY AMENDED) The method according to claim 16, comprising the step of:

~~(c)~~ identifying a data type of a payload in each of said ~~one or more~~ packets from a packet header in each of said packets.

18. (CURRENTLY AMENDED) The method according to claim 16, wherein said ~~one or more~~ new packet is selected from a group consisting of (i) Internet Protocol ~~IP~~ packets, (ii) Packet-Over-SONET/SDH ~~(POS)~~ packets, (iii) Point-to-Point Protocol ~~PPP~~ packets, (iv) Asynchronous Transfer Mode ~~ATM~~ cells, (v) G.702-based Plesiochronous Digital Hierarchy ~~PDH (T1/T3)~~ packets~~,~~ ~~SRP packets,~~ and (vi) Frame Relay packets~~, or byte-stream~~.

19. (CURRENTLY AMENDED) The method according to claim 17, further comprising the step of:

~~(D)~~ determining a reusability of each of said ~~one or more~~ packets.

20. (CURRENTLY AMENDED) The method according to claim 19, wherein ~~step (D)~~ said determining is further ~~configured~~ in response to a reuse bit in a header in each of said packets.

21. (NEW) The apparatus according to claim 15, wherein said nodes are further configured as add/drop multiplexers for said network.

22. (NEW) The apparatus according to claim 15,wherein said network comprises one of a Synchronous Optical Network frame and a Synchronous Digital Hierarchy fiber optic network.